



18 - 23 AUGUST 1996

20th WORLD CONGRESS

SICOT

96

AMSTERDAM

F I N A L

PROGRAMME

P2.500 The Postsurgical Endocrine Status of Orthopaedic Patients Pretreated with Mild Stress Influences

S. Bozgekova, A. Avrunin, K. Novosiolov, Russian Institute of Traumatology and Orthopaedics, Department of Laboratory of Isotope Investigation, St. Petersburg, Russia

The blood serum levels of several hormones were assessed in 55 patients undergoing elective surgery on the knee joint. All of them were pretreated with mild stress factors. The control group without and pretreatment of this kind included 62 persons. The pretreatment with pyrogenal led to the decrease of the dispersion of the cortisol level amplitude oscillations and to T4 increase. Normobaric hypoxia resulted in the increase of the length of the oscillation periods of insulin, T4, T3, and of the oscillation range of T3 and insulin levels. The dispersion of the oscillations of insulin level ranges increases, and that of T3 decreases. The application of both stress factors increases the lengths of the periods of insulin, T3, T4 oscillations, and the dispersion of the oscillations of the insulin level ranges. The found changes ($P < 0.05$) of the biorhythmical characteristics of the endocrine status reflect the increase of the adaptational potential of the system concerned with the energy supply.